UNITED STATES SECURITIES AND EXCHANGE COMMISSION May 2, 2016

ORDER GRANTING CONFIDENTIAL TREATMENT UNDER THE SECURITIES ACT OF 1933

Alnylam Pharmaceuticals, Inc.

File No. 333-113162 - CF#33478

Alnylam Pharmaceuticals, Inc. submitted an application under Rule 406 requesting an extension of a previous grant of confidential treatment for information it excluded from the Exhibits to a Form S-1 filed on February 27, 2004.

Based on representations by Alnylam Pharmaceuticals, Inc. that this information qualifies as confidential commercial or financial information under the Freedom of Information Act, 5 U.S.C. 552(b)(4), the Division of Corporation Finance has determined not to publicly disclose it. Accordingly, excluded information from the following exhibit(s) will not be released to the public for the time period(s) specified:

Exhibit 10.19 through March 1, 2019 Exhibit 10.20 through March 1, 2019

For the Commission, by the Division of Corporation Finance, pursuant to delegated authority:

Brent J. Fields Secretary